INSTALLATION INSTRUCTIONS

HD16D
### Component Video and Audio Distribution Amplifier

INTRODUCTION

The HD16D is a multi-A/V compatible distribution amplifier. Built to the highest standards, the HD16D is capable of distributing high-definition images to multiple displays at over 150 feet. Multiple HD16Ds can be daisy-chained to increase the number of distributed displays.

Features
• Drives up to six audio/video components from a single A/V source
• Compatible with all HDTV signals (720p, 1080i, 1080p), analog video and audio, and digital audio
• Low A/V distortion for crisp sound and picture
• Gold-plated RCA-type jacks
• Supports component video (Y, Pb, Pr), RGBHV, and composite video
• Supports analog Left & Right audio, digital audio – S/PDIF
• Active Expansion Output – Daisy chain and maintain same great picture quality
• Allows up to 150 ft. runs
• "Flat Pack" design for ease of placement and mounting
• Very low noise-floor on video and audio channels

General Info
• Power Supply: 9VAC @ 1A (included)
• Dimensions: 10.8"W x 1.4"D x 6.5"H
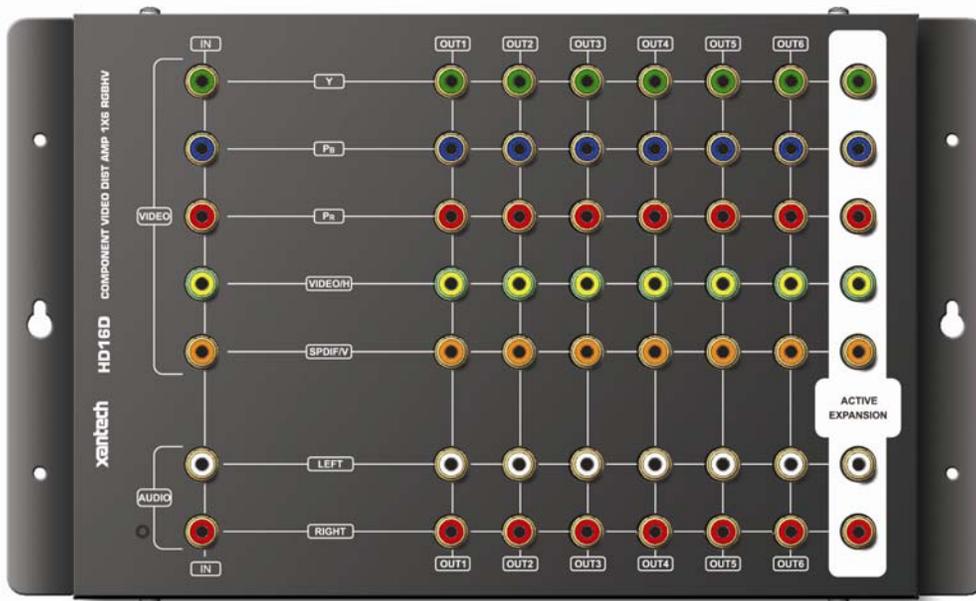
INSTALLATION

1. Use high quality low-loss cables (RG-6 recommended) for all A/V connections. For runs in excess of 10 feet, use low-loss RG-6 coax. Runs in excess of 150 feet are not recommended.
2. The HD16D power should be switched on and off at the same time as the source equipment. It is recommended to use Xantech's 680 AC Switcher to power synchronize all components. This will keep the video and audio signals at the same level.

| Application	Connection
Component Video	Y, Pb, Pr
Composite Video	Video, Y, Pb, or Pr
RGBHV	Y, Pb, Pr, Video/H, SPDIF/V
Analog Audio	Audio Left, Audio Right
Digital Audio	SPDIF/V

Cascade HD16D's to Create Multiple Outputs

One HD16D can distribute up to seven outputs. Additional outputs can be created using daisy-chained HD16D's connected to the built-in Active Expansion output. The application diagram shows two HD16D units cascaded to create up to 13 outputs. With the HD16D, distribution capacity is virtually endless.
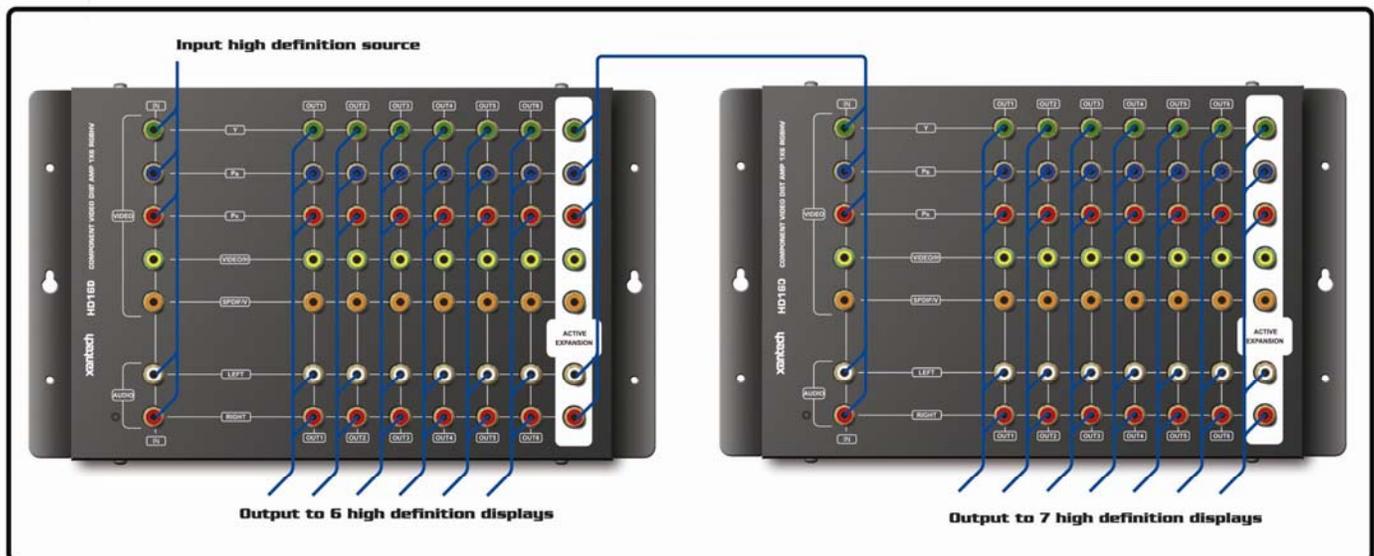
Expansion of Remote Location

To extend up to 1000 feet, use HD44CC5 or HDTXSG01 and HDRXSG01 as such.
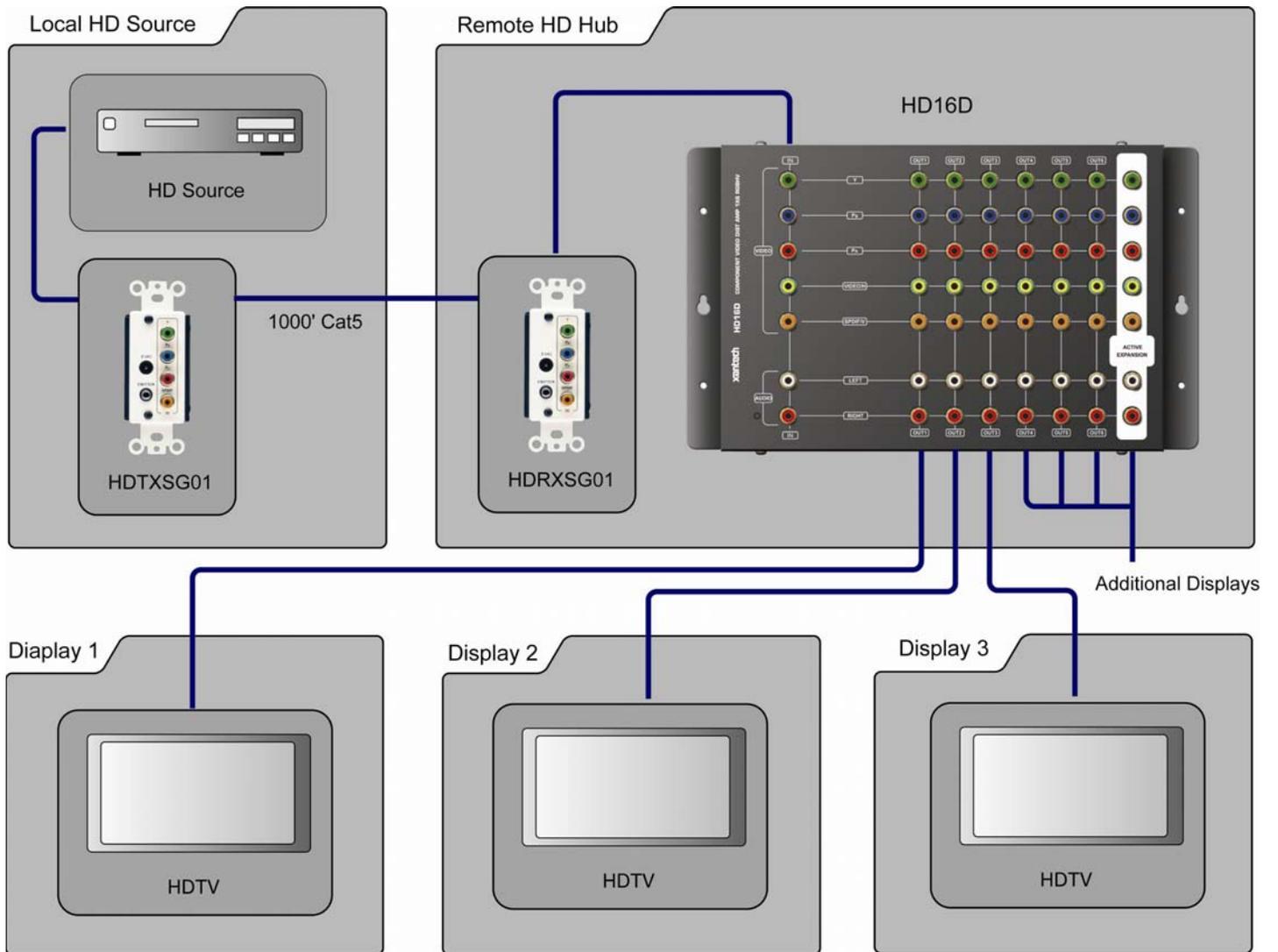
SPECIFICATIONS

Video
Gain: 2 Volt non-terminated, 1 Volt terminated, 75 Ohms ±1%
Input Impedance: 75 Ohms
Output Impedance: 75 Ohms
Video Insertion Loss: 50 Hz to 10 MHz < .40 dB
Video Crosstalk: ≥ 70 dB @ 10 MHz
Return Loss: 50 Hz to 10 MHz 20 dB
Video Bandwidth: > 100 MHz
Video S/N Ratio: ≥ 70 dB @ 10 MHz
Video 2nd Harmonic @ 10MHz: -45 dB

Audio - Analog
Gain: Unity
Input Impedance: 20 kOhm
Output Impedance: 150 Ohm
THD: 0.05% at 1.0 Volts input level
Frequency Response: 0 to 60 kHz
Channel Separation: > 75 dB at 1 kHz
In to Out Isolation: 60 dB
Out to Out Isolation: 60 dB
Signal to Noise: >110 dB reference 2 Volts RMS output
Max Signal Level: 2.9 Volts RMS

Audio – Digital
Supports standard SPDIF digital audio. Unity gain when terminated into 75 Ohms (2 times gain high impedance). Greater than 50 MHz of bandwidth to ensure minimal degradation. Can also be used as a composite video distribution.

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